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ORIGINAL AND SELECTED ARTICLES.

LEPRA.

BY JAS. H. LOW, M. D., OF NEW YORK CITY.

Believing that the subjoined case might not be uninteresting to your numerous readers, I give you a synopsis of it.

We were called on the 12th of last December to see Mrs. N., residing on Fifty-ninth street in this city—a native of England, aged sixty-eight years—who has resided in the United States thirty years. When first seen, her limbs were swollen to twice their usual dimensions, and were of a dark, livid color, assuming that form of the disease denominated *Lepra Nigricans;* scales from one-quarter to one inch in diameter forming on her limbs to one pint or more in twenty-four hours, with general itching over the body and upper extremities; tongue heavily coated—edges and tip red; circulation from eighty to ninety per minute; little or no appetite, and very despondent, as she thought her case incurable—remarking that she had been treated for the last twelve months by doctors in Albany and New York city, who said they could cure her but had failed. She also complained of insomnia, caused principally by the stiffness and itching of the lower limbs, which were mostly involved at the beginning.

I endeavored to obtain from her the line of practice pursued by her former medical attendants, and as well as could be ascertained it was

the usual course adopted in such cases, but as she claimed without any good results—hence her despondency. Under these circumstances we took charge of the case. We prescribed a pill composed of pilulæ hydgr., one grain; podophyllin, one-quarter of a grain; extract colocynth comp., one grain—one pill at bed-time. Also the bromide of potassium alternating with opiates to be taken *pro re nata* to quiet nervous excitement and procure sleep. We also prescribed liquor potassæ arsenitis in doses of eight drops three times daily; which treatment we continued ten days or two weeks; and while the pills and bromide acted like a charm, as evidenced in her satisfactory and refreshing sleep, and tongue cleaning off, and a return of appetite, yet the Fowler's solution produced that peculiar swelling—*œdema asenecalis*—which we discovered in her face and eyelids. She then informed us that some one of her former medical attendants had used that remedy before. We now commenced with the potassi iodidum in six-grain doses three times daily, in conjunction with the mercurial pills as we thought they were needed; and in consequence of the enormous swelling of the lower limbs, we applied equal-pressure roller bandages from the toes to half-way up the thighs. This treatment was pursued for two months; in the meantime, while the lower limbs seemed to improve a little, the upper extremities and whole body became involved. Language is inadequate to describe her appearance. I have not seen such a case in any of the hospitals I have ever visited. Hobbling to her bed, which she persisted in doing without help, she could be traced by the scales on the floor, handfuls being taken from her daily; in many instances the blood following the scraping off the scales. We had to discontinue warm baths. As the lower limbs first showed evidence of the disease and had continued up to the present, we concluded that a seclusion of Atmosphere, combined with equal pressure, was necessary to restore the blood-vessels to their normal condition; consequently, the starch bandage was applied twice per week to the lower limbs, and continuing the potassium iodide with the addition of the syr. sarsaparilla comp. three times a day—ten grains of iodide in two drachms of syrup. This treatment was continued for three months, observing a little improvement each successive week, the limbs gradually assuming their natural size and appearance with less of itching and scaly eruption. During the latter part of the treatment we gave quinine and iron as a tonic, and recommended driving in Central Park. In the latter part of our treatment erysipelas supervened, but disappeared by the application of usual remedies and the limb was left apparently freer from disease than before the attack of erysipelas. We persevered in the application of our starch bandage observing that Alcoholic stimulants internally or grease applied ex-

ternally aggravate the symtoms. She now has a good appetite, tongue cleaned off, sleeps well, her skin smooth, her appearance natural and no symptom or trace of the disease left when we discharged her on the 25th of April last. She is now on a visit to friends in the upper part of this State.

NEW YORK CITY, May, 1880.

YELLOW FEVER, A MORE INDIGENOUS THAN EXOTIC DISEASE AND NOT BELONGING TO THE ZYMOTIC IN THE SHAPE OF CONTAGION.

BY L. V. WEATHERS, M.D., OF ARK.

You will please allow me to notice through your columns the article of Dr. Greenley, of Kentucky, upon the nature of yellow fever and its fearful ravages. The Doctor takes the position that it is indigenous, the only man whom I have read after through any of our journals who really advocated what I believe to be the true and chief cause of this malady.

I believe yellow fever to be based upon malarial influences alone, the same causes giving rise to some of our most malignant and pernicious types of fever, being in a more poisonous form still, when confined to crowded towns and cities, being mixed with the animal as well as decayed vegetable matter, which being pent up in the walls of large cities and towns becomes more poisonous in its nature. The inhabitants all breathe in the same atmospheric poison; all become infected from the same cause, and consequently greater is its spread, and hence, on this account alone, it is now classed as zymotic, propagated by contagion or contact. I believe the germ of yellow fever lives in cities built upon low flat ground, for ages, and even while building cities the uneven ground is often filled by rubbish, etc., which may form by decay new earth, and the dampness, which may originate in cellars or around cities, arises oftentimes from new made earth of vegetable and animal matter.

I read a report from one of the Sanitary Committees of New Orleans some two years ago, and it was discovered that the dump carts had emptied loads of refuse matter, animal and vegetable, in portions of the city until they had filled some ravines or uneven spots of ground, and upon a careful investigation it was found to be nothing more than a soft pulpy mass from the animal and vegetable decay going on beneath, a poison emanating from rotten cabbage, etc. Is not this malarial and animal poison combined? And is not this the case in every city without the aid of vigilant sanitary committees?

Then I concur with Dr. Greenley that it is not an exotic disease but

has its nidus among us. The Doctor says where there are so many different views and opinions regarding any one thing, it is pretty strong proof that it is either poorly understood, or that the subject is obscure and exceedingly difficult to investigate. I heartily endorse him in this position, and at the same time maintain my position that it is a malarial disease and generated by malarial influences, and like our pernicious fevers, frost puts an end to it. I cannot but think that our so-called swamp fever here, or in other words yellow fever, for it is nothing else in its true sense in a modified form, all of which is based upon malarial influences, confined, as its name designates, to low, flat swamps, the nests of malaria, and if this same cause mixed with animal matter such as they have in cities, and that atmosphere pent up, it would have all the malignancy of yellow fevers that occur in cities. I say so without fear of successful contradiction. I meet with yellow fever here without all these contaminating surroundings, and what do we see: the patients, inhabitants of malarial districts, having chills for awhile previous; finally, a distinct rigor seizes the patient; severe and constant vomiting, with discharge of ropy mucus, ensues; now and then a little green bile, but seldom; the straining continues, and retching to a distressing degree; the urine now is nothing but pure blood, the bowels closely confined, and the patient as yellow as a pumpkin—even the eyes perfectly orange.

What is this but yellow fever based upon malaria?—and the odor which emanates from the body is really sickening.

I have seen these cases, and treated them successfully in the following way, and had I a regular case of yellow fever in Memphis or New Orleans, I would treat it upon the same principle and would risk my life on it if I was its victim.

Treatment.—If you see the victim early, give four or five grains of calomel with opium if you can, but I had rather rely upon the calomel alone. You cannot give anything by the stomach after twenty-four hours. Use boiled corn around the patient; keep twenty-four ears in a large pot, place twelve ears around the patient and continue the heat until he sweats freely; then rub the inside of the thighs with mercurial ointment, and bathe the body every two hours, and rub it in with quinine, strong tincture of capsicum, and good apple vinegar.

This is the only treatment, and when you succeed in salivation you then can claim your patient safe, and not 'till then; and not a severe salivation are you going to set up after all. Does not this show the re-establishment of the secretions shut up by malarial poison?—such poison as, if mixed with the animal matter and pent up in a city, would generate regular yellow fever—not contagious, but dependent upon a true malarial cause.

ON SOME POINTS IN THE THERAPY OF ACONITE.

BY J. W. HICKMAN, M. D., DELTA, PA.

Though an old remedy, aconite does not enjoy that degree of popularity to which it is entitled. In its sphere of influence it is one of the most valuable agents we possess. Its extended employment by homeopathists has tended largely to arouse a prejudice against it among regular practitioners; its use by those quacks, however, does not detract one jot from its real worth. In this paper we shall omit all theoretical considerations, and shall state only those facts which experience has tested, and which may hence be regarded as perfectly trustworthy.

Aconite depends for its activity upon the aconitine or aconitia which it contains; the other alkaloids which have been thus far discovered are aconella and napellina. An important point to be distinctly understood at the outset is that aconite is a drug possessing, upon the basis of dosage, a two-fold and opposite action; that is, the effect of a small dose is diametrically opposite to the effect induced by a large dose. This may be best seen in its influence upon the circulation; a small dose as a drop or two will slow the heart's action, while a large one will hasten its activity. Any one may test the truth of this statement for himself. Without an appreciation of this fact it is utterly impossible to derive satisfactory results from the administration of aconite. In small doses aconite will be found to control the heart, both in point of frequency and power of contraction. It also lessens arterial tension, and increases elimination by the skin; and, according to some authorities, it increases the functional activity of the kidneys. Most observers will, I think, agree that its diuretic tendency is not constant, however. To possess an accurate knowledge of its therapeutics, then, it becomes us to seek after the conditions upon which this variance depends. G. Hunter McKenzie tells us (Practitioner, Jan., 1880), as his conclusion from a series of careful observations, that in cases marked by an absence of cardiac and renal diseases, and in certain febrile conditions, aconite has a tendency to increase the urinary secretion. Every practitioner can, in cases requiring the use of aconite, test for himself the accuracy of these conclusions.

Aconite will also slow the respiratory movements, and will lessen abnormal heat. The heart, however, seems to receive the brunt of its action; for, in case of poisoning, the cardiac movements cease before those of the respiration. The systemic effects of the drug are manifested in about thirty minutes, and last for about three hours; hence the dose should be repeated at about this interval. Of course, aconite is contra-indicated in all conditions of adynamia. It should be remembered, too, that aconite will increase an existing irritability of the gastric mucous membrane, thus impairing the appetite, hindering digestion and causing diarrhea. In the normal state of the mucous membrane, however, it will increase the gastric secretions and accelerate the peristaltic movements.

In addition to the measures usually instituted in cases of poisoning by aconite, digitalis should be recognized as a valuable antagonistic to the depressing influence of the drug in question. It was first recom-

mended by Fothergill. In a recent clinical lecture Professor DaCosta recommends the hypodermic injection of two drops of the fluid extract of digitalis in water, in any case of heart-failure from whatever cause; this is at once an efficient, prompt and convenient method of administration, and richly deserves to be held in memory, not only in aconite poisoning, but in like conditions generally. In such of the acute inflammatory and febrile conditions as are especially marked by sthenic reaction (high temperature, increased arterial tension and rapidity of pulse), aconite is a highly valuable agent. The continued fevers form an exception to this statement, save where great hyperpyrexia obtains.

This drug interferes in no way with other measures indicated in these conditions; it does faithfully its own special work, and leaves the attendant free to meet other indications as they present themselves. Aconite takes no second rank in the treatment of those *acute inflammations of the respiratory organs* which are at all extensive. Than this drug there is no more reliable in acute *pneumonia* and pleurisy.

But a few days ago I prescribed two drops of the tincture of the root every three hours in a case of pneumonia at the base of the right lung. There was, when first seen, on the fifth day after the invasion, delirium with a temperature in the axilla of 103.4°, and the pulse, full and bounding, was driving away at a rate of 132 per minute. At nearly the same time on the next day the thermometer registered but 100.1°, and the circulation was fully under control at 85 pulsations per minute. The aconite was the only agent given internally; of course poultices were applied externally.

Nor is this an isolated case; I have seen the same good result over and over again. As a rule, aconite is the only remedy necesssary up to the period of crisis. It will be found useful at any stage, however, for it not only moderates the activity of the symptoms, but assists in the removal of inflammatory products. Pleurisy, too, up to the stage of effusion, is best treated by small doses of aconite. If there be severe pain, it will be well to combine it with some preparations of opium.

℞ Tinc. aconiti rad..... ℥ ij.
Tinc. opii deodorat..... ℥ vi.

Dose, eight drops in water every two or three hours, or at first oftener. With poultices externally no treatment is more efficient.

The hot stage of intermittent and remittent fevers may be greatly modified in intensity by drop-doses of aconite every half-hour or hour. It may be conveniently given in some fever mixture as the effervescing draught or neutral mixture. Aconite is almost indispensable in the treatment of certain stages in scarlet fever—the eruptive stage and the stage of desquamation. It not only lowers the temperature, but it increases elimination by the skin and kidneys, and tends to check the nasal, faucial and aural inflammations which constitute such troublesome complications and such terrible sequelæ. In measles where the temperature runs high, or where acute pneumonia or bronchitis threatens, aconite is by all odds our best remedy; it will control the tendencies of the disease as no other agent can.

Peritonitis is best treated by a combination of aconite and opium, similar to that recommended above for pleurisy; larger doses of opium will be required, however. Aconite is a valuable remedy in cerebral

and cerebro-spinal meningitis, and also in the active form of acute cerebral congestions, occurring within the cranial cavity. The very best remedy we can employ in cardiac hypertrophy is aconite, in one or two-drop doses, three times a day, for a week or two; it is then well to drop to twice a day, of course watching carefully the effect of a protracted use. As a rule the drug must be continued for six or nine months. In addition to this, the exciting cause must be removed, and the patient lie down a few hours each day; thus every indication of the case is at once met, and more than this plan of treatment nothing can be done.

We are told by Ringer and by Phillips that suppression of the catamenial flow, caused by cold, can be relieved by drop doses of aconite, repeated every half-hour or hour. In intense traumatic inflammations it is well to combine aconite with a small quantity of sulphate of morphia.

Much has lately been written as to the efficacy of aconitia in neuralgia. I cannot speak from experience with the remedy, but it is recommended by authorities whose capability or veracity cannot for one minute be called in question. Dr. Robert F. Weir, Surgeon to the New York and Roosevelt Hospitals, reports a case of eighteen years standing which he cured by this agent. The affection was, in the main, confined to the distribution infra-orbital nerve of the left side of the face, with the paroxysm recurring nearly every minute. Sleep had been obtained by chloral and opium. At first 1–140 of Duquesnel's preparation was exhibited three times per day. In two days it was increased to 1-96 grs. *per die*. After another two days four doses per day; no physiological effect, although the pain was relieved. After eleven days from the first dose, seven doses of 1–96 grs. were given per day; no physiological effect save a slight chilliness. The pain soon left him entirely. Dr. E. C. Sequin prescribes it thus:

℞ **Duquesnel's aconitia ..... gr. 1-12 to ¼.**
Alcohol.....
Glycerin.....aa ʒj.
Peppermint water.....ad. f. ℥ ij. M

Dose, one teaspoonful three times per day. The dose is to be steadily but carefully increased. He sometimes finds it to succeed perfectly, and again it proves absolutely worthless. We can only say that, in the absence of other effective means, this agent merits a persistent trial. As a local application in painful conditions, Bartholow recommends the following:

℞ **Tinc. aconiti rad.....**
Chloroformi.....aa ʒ ss.
Lin. saponis..... ʒj. M

Dose, moisten a piece of flannel and apply to painful point. He says it is much more efficient than the officinal aconite liniment.—*Country Practitioner.*

Faraday says, in a lecture, that Society, speaking generally, is not only ignorant as respects education of the judgment, but is also ignorant of its ignorance; correct judgment with regard to surrounding objects, events, and consequences becomes possible only through knowledge of the way in which surrounding phenomena depend on each other.

COLD WET SHEET PACK IN SCARLATINA.

BY DUDLEY M. CULVER, M.D., OF WHITESVILLE, INDIANA.

We have just passed through a severe epidemic of scarlet fever in this section, and as we have had several deaths, it gave us room for scientific research in order to give our patients the best medical aid that was known to the profession. The epidemic at this point took a peculiar course, affecting adults more seriously than little children, and we had the disease in every form, from the most simple to the most malignant.

Our first cases we treated with antizymotic remedies, together with sponge baths and "old bacon grease" as external remedies, and despite our efforts we lost some cases; all this time fearing to use heroic treatment, on account of public opinion. But I have since formed a resolution to use such remedies hereafter as my judgment dictates, and let public opinion take care of itself. The cases we lost died, beyond a doubt, from uræmic poisoning, and we know that uræmic poisoning is caused by the rapid disintegration of tissue, induced by *excessive high temperature*, converting urea into carbonate of ammonia. Hence, this being the case, common sense ought to teach us that the excessive temperature in scarlet fever must be reduced or death will be the result. But what is an excessive temperature? I will say that in our research we found that if the temperature can be kept at or below 102° there is little danger, but in all of our malignant cases the temperature commenced at from 103½° to 105½°, and this is what we found to be excessive and truly dangerous; and truthfully does Prof. Reamy, of Cincinnati, speak when he says that "where the temperature stays at 105° for 24 consecutive hours he has never seen a case get well." Hence we see, and have found by experience, that the temperature is what we have to fight in the first five days, and guard against albuminuria after convalescence.

And they may suggest antizymotics, such as "sulphurous acid dilute, hyposulphite of soda, iron, etc.," but I find it is a dangerous practice in a disease as treacherous as malignant scarlet fever. There is no mistaking the fact that the temperature is what we have to fight, and, consequently, our main reliance must be on remedies that will reduce the temperature, and, at the same time, use diuretics as a shield against suppression of the urine.

Public opinion was strong against the *cold wet sheet pack* when it was first mentioned, the people supposing it would repel the eruption, drive the fever internally, and cause instant death; and as death was to be feared in malignant scarlet fever, we hesitated using such a heroic remedy, knowing too well that should our patients die the world would be ready to say that "the wet pack done it."

But finally I had a malignant case that was almost hopeless, Lelia S——, aged 12 years, temperature commenced at 103½° and rapidly rose to 105°. I could reduce the temperature by ordinary methods as low as 102°, but it would suddenly fly up again. She was restless, inclination to delirium, and threatened with uræmic poisoning. Finally I sent for my counselling physician, R. French Stone, M.D., of Bain-

bridge, an excellent physician of wide repute, and by our united efforts secured the right to use the cold wet sheet pack on this case.

Commenced Thursday evening at six o'clock with a temperature of 104½°. Stripped her of all clothing and wrapped her in a sheet wrung out of cold well-water. The result was very flattering. The temperature next morning at 7 a.m. was down to 101¼°, a reduction of 3¼° in thirteen hours. The wet sheet was renewed as often as it became warm.

This case made a good recovery, and we have tried the *wet pack* in several malignant cases since where the temperature would reach 105°, and with the same result. We used internally at the same time :

℞ **Tinc. digitalis**..... ℥ij.
Fl. ext. jaborandii..... ℥j.

Dose, a teaspoonful every four hours.

I will say that in place of repelling the eruption the pack brought it out more abundantly; and it is surprising how rapidly the patient becomes quieted and sleepy after the first application of the pack.

This is only necessary, understand me, in malignant cases, with high temperature. We don't treat all cases of fever alike, but treat a disease as the disease is presented to us. Many cases of scarlet fever will yield at once to diuretics and diaphoretics. Such cases, of course, need no wet sheet. But in conclusion let me say, *Fight the temperature as a consuming fire.—Ind. Practitioner.*

CHICKEN CHOLERA—PASTEUR'S NEW EXPERIMENTS.

Mr. Pasteur's last communication to the Academy of Sciences and the Academy of Medicine upon chicken cholera, is not only the great scientific event of the month, but without doubt contains one of the greatest discoveries of the times. It is still the process of cultivating microscopic beings which forms the basis of the new experiments and which has permitted the grouping together in one sheaf of new facts that give us a glimpse of more correct scientific conceptions of the nature of diseases for the future, of a better treatment and protection, and a prophylaxis such as we have never been able even to dream of.

Under the name of chicken cholera is designated an epidemic disease of very rapid progress which depopulates the poultry yards. Loss of strength, depression, and invincible somnolence characterizes it. A microscopic organism is the cause of this disease. It was discovered by Moritz and has been described particularly by Peroncito and Toussaint, of Toulouse. Of extreme smallness, when it multiplies it forms, with marvelous rapidity, immense quantities of new organisms so minute that they are not measurable by the microscope.

Mr. Pasteur has studied this organism as he has that of the bacteria of malignant pustule (charbon), and has ascertained that it must have a peculiar medium of cultivation; chicken soup (bouillon de poule); other solutions, suitable for the culture of other microscopic organisms (microbes) are absolutely unsuitable to its culture, it is reproduced badly therein, and perishes rapidly. There is a very curious relation between the medium of cultivation and the living individuals, of which

one is suited to the development of an infectious disease, while another animal species is absolutely refractory to it.

When this cultivated microbe is inoculated, or when the blood of a fowl dead from cholera is inoculated, the same effects, the same development of disease and rapid death follow, almost certainly, in every case.

Chicken cholera, like the most of the infectious diseases, appears to guarantee the individual that has had it against recurrence. If a fowl has recovered from cholera it may be inoculated without result with the blood of a choleraic fowl, it resists the development of the disease.

Now, and this is the capital point in M. Pasteur's communication, by a peculiar mode of cultivating the microbe he has succeeded in obtaining an enfeebled microbe, which is incapable of killing the fowl but of protecting it against the cholera contagion. The fowl inoculated with the modified microbe is sick, but it does not die, it always survives. After it has regained its health, if it be inoculated with the strong, normal virus, with the blood of a fowl that has died of unmodified chicken cholera, it does not die, it is not even made sick.

Thus, in every respect, M. Pasteur has created vaccination against chicken cholera. He has not yet disclosed his method of thus enfeebling the power of the microbe, but will make it known in an early publication. From this may we not see for the future a limitless field for therapeutics and prophylaxis?

What an influence is exerted by the soil upon the development of the micro-organism has never before been so well demonstrated. Certain animal species are entirely unaffected by it; upon others, the rabbit and the Guinea pig, a local lesion is produced in which the microbe multiplies and preserves its virulence, but does not generalize its action.

Finally, the micro-organism does not develop again in the individual in which it has once developed. Again, the chicken soup in which the microbe has been reproduced in abundance ceases to be a good soil for it. If it is filtered and thus cleared of these organisms which have been abundantly produced, but forming only an insignificant mass, the soup, although suitable for the development of other species of vibrios, no longer permits the production of the cholera microbe; it is worn out for this species as is the organism which has once passed through the disease.

The transmission of this disease from one fowl to another is easy of accomplishment, for nothing more is necessary than to cause a fowl to injest some of the parasites, and it soon falls a prey to the affection. Should the pus from an abscess, caused by inoculating an animal like the Guinea pig with the disease, should some of this pus containing quantities of vibrios be mixed with the food given to fowls, the latter are quickly affected with cholera. Hence there are two methods of contagion: the direct and the indirect which throws light on many facts hitherto obscure.

As to inoculation, there is ordinarily produced a grave local disorder: induration, purulent infiltration and gangrene. The region swarms with micro-organisms. If the fowl has already been vaccinated, the local lesion is insignificant, the point affected throws off a small slough of no consequence.

Such, in short, are the facts which M. Pasteur has just shown to the

Academy when he reminded the members of the works of Davaine, Chauveau, Klebs, Koch as well as his own, upon the part taken by vibrios in virulent diseases and upon their transformations. By experiment he boldly attacks the most difficult problems in general pathology, and we already see him in possession of most important information concerning the modes of transmission of diseases and the power of resistance acquired by the organism which has withstood one attack.

It is to be seen that what is called the germ theory has entered upon a new phase. Pasteur's communication has produced a considerable sensation in the learned world, and we are willing to leave this sketch in the hands of the reader without further comment.—*Journal de Medecine et de Chirurgie pratiques.*

SULPHIDE OF CALCIUM IN THE TREATMEMT OF SUPPURATING BUBOES.

BY FESSENDEN N. OTIS, M. D.

My attention was first called to the value of the sulphide of calcium in arresting processes of suppuration through an article in the Lancet of February 21, 1874, by Sidney Ringer, M.D. Dr. Ringer claimed that, when the product of suppuration in scrofulous sores was thin and ichorous, the administration of small doses of the sulphide of potassium or of calcium promptly changed the purulent fluid to one of a more healthy character, and that the healing of the sore was promoted. He also claimed that the formation of boils and abscesses was prevented by a timely administration of small doses of the sulphides, and that, when suppuration had already occurred in such cases, the suppurative process was quickly arrested through the influenee of these remedies. Opportunity for a practical test of these claims soon occurred, and resulted in my own personal conviction of their entire correctness, and I have now for the last five years habitually prescribed the sulphide of calcium in cases of threatened suppuration in phlegmonous swelling from various causes, and, as a rule, with very gratifying results. The manner of its use was practically the same as advised by Dr. Ringer, viz: 1-12 grain of the sulphide of calcium every two hours, or 1-20 every hour, during the day and up to the time of retiring. Especially have I found small doses of the sulphide of calcium useful in arresting the progress of furuncular swellings and abscesses, and in preventing their occurrence when threatening. On the other hand, I have repeatedly tested the influence of this drug upon the suppurative processes in mucous membranes, as in gonorrhea, gleet, leucorrhea, etc., without being able to discover that it influenced or modified the suppurative process in such cases in the least degree.

Among the cases in my private practice where prompt arrest of suppuration was quickly followed by absorption of pus already formed and resolution of tumor, and apparently from the use of the sulphide of calcium, were several inguinal buboes associated with chancroid. The simple fact that resolution occurred in these cases were (in accordance with the popular teaching) accepted as proof that the buboes were of sympathetic and not of chancroidal origin.

Authorities have long taught that, once the virus from a chancroid has been carried along a lymphatic vessel and deposited in the adjacent lymphatic gland, inflammation is at once set up in the substance of the gland. This, it is claimed, goes steadily on in spite of all and any treatment until an abscess is formed. This must, sooner or later, through advance of the suppurative agency or by surgical interference, result in an open ulcer, the pus of which will possess the same vicious character as the chancroid from which it was derived. This variety of bubo is known as the virulent or chancroidal bubo. The suppuration of such buboes has been considered inevitable, and all buboes not pursuing this course have been set down as not of true chancroidal but of simple or sympathetic origin. Inflammatory lymphatic enlargements associated with chancroid are very naturally dreaded as most likely to prove by results to be of chancroidal origin, and usually, after a few feeble attempts at treatment with a view to their resolution, glands affected are encouraged to suppurate, and prompt incision and evacuation of pus are advised as soon as the slightest true fluctuation is recognized. If suppuration is indeed inevitable, undoubtedly it is wise to encourage it, to evacuate the virulent product at the earliest moment, and thus afford access for efficient treatment for the destruction of this new-formed chancroid. For this reason I had been an earnest advocate for early incision into suppurating buboes associated with chancroid. My experience in the few cases above alluded to, however, made me incline to the belief that a thorough and extended trial of the calcium sulphide in cases of inflammatory buboes associated with chancroid might give such results as to make its use imperative in every such case.

In order to gain further light on this important matter a systematic use of the calcium sulphide was made, in my service at Charity Hospital, in eighteen consecutive cases of inflammatory bubo occurring with, or as the immediate result of, well-pronounced chancroid. All the facts considered of importance were noted by myself and under my direction by Dr. Johnson, my house surgeon, and are truly confirmatory.

Thus it will be seen that, out of eighteen cases of inflammatory bubo presenting the rational evidences of chancroidal origin, and treated systematically by the use of small doses of the sulphide of calcium, resolution occurred in fifteen, and that in only three cases was incision ultimately required.

If we apply to these cases the usual rule that chancroid buboes always eventuate in chancroidal abscesses, always suppurate and require evacuation by natural means or surgical procedure, then we must hold that only three out of fifteen cases of inflammatory buboes associated with chancroid were the result of transference of the suppurative process from the chancroid to the adjacent lymphatic gland. It is just possible, however, that the influence of the sulphide of calcium may, in arresting suppuration, extend to the true chancroidal bubo. The apparent successful use of this drug in the series of cases herewith presented at least suggests and invites a trial of its efficacy in all instances of threatened glandular suppuration, whether associated with chancroid or of purely sympathetic origin.—*N. Y. Med. Rec.*

IF VERATRUM VIRIDE IS A SURE ANTIDOTE FOR OPIUM POISONING IN THE ACUTE FORM, MAY IT NOT BE IN ITS CHRONIC, OPIUM INEBRIETY?—AN AFFIRMATIVE OPINION.

BY J. S. HALDEMAN, M.D., OF OHIO.

I received a communication, December 16, 1879, from J. B. Mattison, M.D., one of the managers and physicians of Parish Hall, Brooklyn, N. Y., a private medical home for opium habitues; and assistant physician "Sanitarium," Media, Pa., speaking praiseworthily of my articles on morphia poisoning, which appeared in the Cincinnati Lancet and Clinic; in which he asked, if I knew "anything regarding it in the chronic form; opium inebriety strictly speaking; and what is your idea as to the *modus operandi?* Are you inclined to think it would be very valuable in chronic opium taking?"

My reply to him was substantially as follows:

Dear Doctor, I will endeavor to answer your interrogatories to the best of my ability. First, you wish to know, if I have any knowledge of the virtues of the veratrum viride in the chronic form, or opium inebriety. I would answer I have not practically. I can only give you my opinion theoretically; which would be answering your second question, to wit: what is "my idea as to the *modus operandi?*"

The two articles, opium and veratrum, have evidently antipodal effects, as much so perhaps, as any other two in the materia medica. Therefore I should think that the veratrum would be the leading article in removing the pernicious effects of its antagonist, opium.

Opium is a direct stimulant and an indirect sedative of the nervous, muscular, and vascular system. On the other hand, veratrum viride excites the entire secretory system; hence it is emetic, expectorant, diaphoretic, and diuretic. It also stimulates the nerves, and hence is a nervine. It reduces and calms the circulation, and hence is an arterial sedative.

Now, when opium is administered for the first few hours, if the dose is not inordinately large, it augments the volume and velocity of the pulse; elevates the temperature; and increases the circulation, producing a general stimulation of the whole system. But after perhaps from twelve to twenty-four hours the giving of the drug, as a rule, sedation obtains, and the entire vital force of the nervous, muscular, and vascular system is lowered, and which calls imperiously for a repetition of it. As a sequence the secretions are measurably arrested through its contractile power over the muscular fibres. This, perhaps, accounts for the fact, that the opium user has always a more or less cadaverous appearance, showing plainly the diminution of the secretions, and in connection a change of the normal proportions of the globules of the blood.

Then the question would naturally arise in the mind of the physician, who wishes to remove this condition of things; what article as a remedy would he resort to? The question is plain, certainly the one that would bring a counter state of things; and that one is the veratrum viride, as I have already shown, though it may be faintly.

Dear Doctor, I think I have given you the *modus operandi*, which is what you asked me to do. I shall not essay to reason out the *modus operandi* in full detail, which would be an unpleasant task, and doubtless might prove unprofitable both to the writer and the parties addressed, for the reason that I have not the time at present, nor the space.

I do not know that the veratrum viride will beget a "loathing" for opium in the person who uses it, but I think it might cause an indifference for it, from the consideration that it will ultimately remove the necessity for its use—the peculiar condition in the system that opium establishes demanding its repetition. It may take the veratrum some time to accomplish this, therefore the remedy must be used delinquently —off and on—until recovery is fully brought about.

In regard to the length of time, for the continuance of the remedy, which was also inquired after, and which would be regarded by me, to depend very much upon circumstances. The idiosyncrasy, in different individuals, varies so constantly and greatly, that the susceptibility to the medicine, in one affected, might be greater than in another, consequently the time in the former would be shorter than in the latter in effecting a cure. If there is any bettering appreciable in the patient during the first two weeks or month treatment, it should be continued another two weeks or month, and so on, until a cure is obtained. But if there is no seeming or real improvement, during the first month or two, I think the treatment might as well be abandoned, with that particular patient, at any rate, for that time. The future, even in such a case, might develop altogether a different diathesis, so that a renewal of the effort would be justified and might be successful.

And now, as it relates to the size and frequency of the dose, and manner of its administration, whether hypodermically or by the mouth, which were also inquired after, I would say, in regard to them, we have to be governed greatly by circumstances, and the peculiar habitudes of the patients. There may be times when the patient might require minimum doses, and then again medium or maximum. Its effects must be closely watched; and be given in frequency and quantity, until it produces slight nausea; and then reduced and even suspended for a time, if need be. The dose might vary from one drop, and even less, to six or ten, or fifteen and more, if bearable, once, twice, or thrice daily.

All things being equal, I think it decidedly preferable to administer it by the mouth. In the acute form this cannot always be done. But in the chronic it would seldom be impracticable. There is not much danger, when watchfully administered, of any toxical results. During the treatment, the better plan is to withdraw the opium, little by little from the beginning, until it becomes safe to withold it altogether, or the indifference of which I spoke obtains. If need be, support the patient after the withdrawal of the opium by tonics, such as quinine, etc.

To me, there appears to be some ambiguity in the quotation you give from Dr. E. H. Sholl:

"In his case there came a gradual loathing of the opium, by which he was enabled rapidly to withdraw the drug—because the system would not tolerate it."

There came a loathing for opium, and in consequence he was enabled to withdraw the drug. What drug? The opium or veratrum? I may

infer it means the latter. The system would not tolerate the depressing effects of it, after the stimulation produced by the opium had passed off.

If so, then tonics were indicated, and should have been given, to take the place of the abandoned stimulus to which it had been so long accustomed, and too in quantity in proportion to the amount of ennui occasioned.—*Cin. Lancet and Clinic.*

TREATMENT OF ACUTE RHEUMATISM.

BY J. ALEXANDER LARUE, M.D., OF W. VIRGINIA.

Those who advocate the salicylic acid treatment *alone*, should remember that in ignoring the alkaline treatment they deny the pathology of the disease. That acute articular rheumatism is due to an acid poison in the blood is a fact generally admitted; and admitting the fact, the alkaline treatment seems to be the most scientific and reasonable of any yet presented to the profession.

Although it may be said that the salicylic acid treatment does shorten the attack, yet it has been the experience of some of our most successful and scientific practitioners that where the salicylic acid alone was used, the liability to endocarditis and pericarditis was greatly increased. On the other hand, the alkaline treatment does not, perhaps, shorten the duration of the attack, but it does diminish the liability to those heart troubles so frequently the sequela of that painful disease.

It seems to me, therefore, that a combination of the salicylic acid with some alkali would best meet the indications. I give my prescription, hoping thereby to add something, at least, for suffering humanity.

℞ **Acid salicylic..... ..... grs. clx.**
Bicarb. Sodæ..... grs. cccxx.
Aqua..... ℥ iv. M.

Dose, teaspoonful every three hours. Should heart-trouble arise, I find great benefit from :

℞ **Tinc. verat.-virid., (Norwoods).....**
Tinc. digitalis.....aa ʒ ij. M

Dose, six to eight drops every six hours. I have found this combination of verat. virid. and digitalis of especial benefit in valvular lesions.

At the beginning of an attack of acute articular rheumatism, the system seems to be "locked up," and I always advise a free cathartic, and in my opinion mercury is the best, in a majority of cases, because there seems to be a decided inactive or torpid liver.

That great benefit results from the use of blisters there is no doubt in my mind, and in extreme cases I have always used them, and always was satisfied with their good effects.

However robust and strong a patient may have been previous to an attack of acute rheumatism, the system is always left in a debilitated condition.

Tonics are necessary, and I do not know that any is superior to mur. tinct. of iron, or if preferred in another form :

℞ Quiniæ and ferri cit ..... grs. clx.
Ext. nucis vomic..... ..... fl ʒ iij.
Simp. syr. q. s. to make..... ʒ iv. M

Ft. sol. One teaspoonful three times a day; or :

℞ Ferri sulph. ex.....
Quiniæ sulph.....aa grs. xxx.
Ex. nucis vomic. (solid.)..... grs. x.

Ft. pills No. 30. Dose, one pill three times daily.—*South Clinic.*

RECTO-VAGINAL FISTULA CURED WITHOUT OPERATION.

BY IRA BROWN, M.D., WELLS RIVER, VT.

September 21, 1878, I was called to see J. L., a maiden lady about forty-eight years of age. She had been an invalid most of the time for twenty-five years, and now complained of frequent micturition, the water having a bad odor and containing a gritty dark sediment.

On making a digital examination, I found a recto-vaginal fistula twelve lines in length, with rounded and thickened edges, showing that it had existed for some time.

Not having the means at hand nor any one to assist in an operation, after introducing the speculum I made a thorough application to the edges of the fistula of a strong solution of carbolic acid, four parts of the acid to one part alcohol. This done the patient was directed to remain in bed, and to use no means to move the bowels until I saw her again.

September 25th, four days after the first visit, she reported herself better, her water having lost its bad odor and containing no sediment.

She was again seen September 29th, eight days from first visit, when an examination showed the fistula nicely closed in its whole extent.

October 9th, eighteen days from the first visit, a careful examination failed to show any trace of the fistula.

In July following, I learn that she had remained well. I would here venture the opinion that carbolic acid may be used in most cases instead of the knife in preparing surfaces to be united with sutures.—*Boston Med. and Surg. Journal.*

A Boston paper wickedly says : When a physician regards a case as hopeless he advises the patient to travel, and thus gets rid of having the victim die under his care.

Medical man : And then, with regard to the swelling at the back of your head, I don't apprehend anything serious, but you must keep your eye on it!

ABSTRACTS AND GLEANINGS.

The Active and Passive Inhalation of the Nascent Chloride of Ammonium in Acute Affections of the Respiratory Tract.—Ephriam Cutter, M.D., of Boston (Virginia Med. Monthly), writes as follows upon this subject:

When the vapors of ammonia and muriatic acid are brought together, immediately at the points of contact a dense cloud is formed that has the microscopic properties of smoke. Under the microscope of 400 diameters, I find that this cloud is made up of feathery crystals that resemble the lighter crystals of snow, and, from their many surfaces, appear white like snow, milk or fine sand. Four needles cross each other at their centres at angles of 45 degrees; so that this smoke is made up of an immense number of minute microscopic crystals that freely float in the air in all directions. This physical property is something wonderful. We are not amazed at the formation and floating in the air of snow crystals, as the atmosphere holds watery vapor in solution; nor are we surprised at the formation of the crystals from the ammonia and muriatic acid vapors; but that crystals of the specific gravity of 1.45 should not at once settle to the ground instead of diffusing themselves as the incomplete products of combustion, we call smoke, is in my mind worthy of remark.

Now, though the chloride of ammonium (*alias* sal ammoniac) is mentioned in all pharmacopœias and in Sancscrit, still, save among the Germans, and latterly among ourselves, no advantage has been taken of this property of aerial diffusion so as to administer it by inhalation. No mention is made of this use in Wood and Bache. But the Germans, Kirkwood and some unprofessional people in this country have given it in chronic affections of the air passages. It is easy to see that the crystals inhaled will impinge in substance on the mucous membrane of the respiratory tract, and serve as if it had been made a topical application; and this, too, in the mildest mode of direct application, having no medium or vehicle of communication save the atmospheric air.

What is meant by "nascent?" This means "born," or, as new birth is the beginning of existence, the Germans have applied the term to the newly-formed chloride of ammonium. They seem to think that there is an especial advantage in having the salt as fresh as possible, as, if it is used just as it is formed, its therapeutical power is greater. Be this as it may, the salt does not long remain in the air, but settles down or is blown off, or diffused in the air. The chemical union is expressed by a simple formula. NH_4O signifies ammonium; HCl signifies muriatic acid; NH_4Cl signifies chloride of ammonium; HO signifies water. (NH_4O—HCl=NH_4Cl—HO.)

What is meant by active and passive inhalation? *Active* is where the patient draws in the nascent chloride, as a smoker uses a pipe or a cigar. *Passive* is where the apartment is filled with the crystals, and the patient inhales as a non-smoker does in a car full of smokers; or the crystals may be blown into the face of the patient. The passive

use is indicated when patients are unable or refuse to actively inhale—as in cases of very sick people, children and infants. This feature of passive inhalation, and the use of the nascent chloride in acute affections, characterize this contribution to the therapeutics, the nomenclature and the apparatus of this subject.

The writer here gives illustrations of apparatus for inhaling the nascent chloride, and adds:

To those who are so situated as to desire to make their own instruments, I may say that useful ones have been made by me from empty pickle jars of two quarts capacity—boring holes through the cork with rat-tailed files, cutting out a V-shaped segment from the cork at its periphery; take a hairpin, impale the sponge on the loop and under the cork, bending a glass tube over a flame, or using a small lead tube (one may be made by rolling up a sheet of lead on a cylinder like a common lead pencil). Often I have used a common gimlet screw to make the holes in the cork—burying the screw in the cork, then forcibly withdraw it, and repeat till the hole is made; then, using the threads of the screw as a rasp, enlarge the hole to a proper size. In lieu of a sponge, a piece of common cotton cloth impaled on the hairpin has answered well.

There are many nascent chloride apparatuses in the market, but they are all for active inhalation as far as I have seen. Moreover, the tubes are too small. I have thought that they should be larger than tracheotomy tubes for viability and to avoid friction; also, the expense is too great in my opinion. While I am not prepared to say that my own apparatus is the best, I can testify that it has worked to my own satisfaction, especially when the patients were too weak to inhale through a tube, or could not swallow their medicines, or where they were sensitive children or helpless babes. (See Boston Journal of Chemistry, February, 1874).

EXAMPLES FOR USING.—*Rhizopod Colds.*—Some readers may recall allusions that I have made in this journal to cases of this kind. It is astonishing how prompt the relief is sometimes; for example, in croupal symptoms associated with rhizopods.

In December, 1870, my son, aged 4½ years, contracted the rhizopod cold. The family had had it previously. I found the living forms of the asthmatos in the nasal secretions. In the day time, he would be comparatively well, and at night on going to bed, though a little restless slept well. But after the family had retired and got quietly settled down into primary sleep, we were soon roused by the typical croupal cough that has so often alarmed parents and startled physicians. From laryngoscopical examination, I am satisfied that the physical cause of the brassy clangor in the cases explored was from the thickened reddened infiltration of the soft areolar submucous tissue about the false vocal cords. In the present case, I could not get a view of the larynx proper any farther than the epiglottis, but inferred from the contagious nature of the cold—from the live rhizopods found—that the irritation caused an inflamed condition of the peripheral part of the larynx so that he could produce at will cough clangor. Anyhow, the passive inhalation of the nascent chloride was followed by the immediate arrest of the cough and continuous sleep through the rest of the

night. My wife insists that this change of treatment (for which we thank Dr. Salisbury)is a great improvement upon our former methods, inasmuch as formerly, with like symptoms, a sickness of several days' duration was sure to ensue—to say nothing of the mental wear and tear occasioned by witnessing and expecting dyspnœa of one's own children. In the morning, on examining the nasal excretions, forms of the rhizopods were found, but they were all dead.

Remarks—A few pinches of powdered sulphur burnt in the apartment will relieve just as quickly as the nascent chloride. Moreover, those physicians who are not familiar with the use of the microscope, may, I think, diagnosticate the influenzas depending upon the rhizopods by the results of inhaling these remedies, according to my own observations. The same is true of the asthma caused by these parasites. I have seen whooping-cough also cured by them.

Typhoid Pneumonia is a very dangerous disease in my experience. The first use of the nascent chloride in this disease, as far as I know, was in the case of a strong Irish-American farm-hand, 22 years old, who in a midwinter of protracted and low temperature, went off one evening and got drunk. Instead of seeking his bed, on his return, he turned in on some hay mown in the barn. The atmospheric temperature was, on an average, 15 degrees below zero. Thus he contracted a severe cold that resulted in typhoid pneumonia—that is, inflammation of the lungs with typhoid symptoms. When I saw him, he was in a third-story chamber of the farm-house, too sick to move; water in a tumbler near the bed was frozen one-half inch thick, and there was no means of making a fire. Fever somewhat high; pulse quick and weak; copious glairy, rusty sputa; physical signs of hepatization of the right lung, lower lobe. Ordinary treatment was administered. Soon his throat became so sore that he could not swallow. He even had muttering delirium at times. Respiration difficult and quick. He took but little notice of anything. His lungs were filled with secretions. Sweating copiously; weakness. Sputa darker in color. Urine high colored; some diarrhea. Here was a peculiar situation—no medication possible by the stomach. So I was forced to resort to inhalation, as it was the only possible method of interference. A nascent chloride of ammonium was extemporized. The man was roused, and fortunately made to understand what he was to do. He actively inhaled ad libitum. Never did anything seem to work so well. There was an immediate improvement in every respect. Fortunately, a thaw came on. He was successfully moved into better quarters. His recovery was prompt and complete. The nascent chloride was the chief medicine used after it was begun with.

Remarks.—Doubters are apt to meet such statements as these by doubting everything. While I am not prepared to say that this man might have gotten well without any treatment, still I do say that the nascent chloride of ammonium was thoroughly administered; and taking this case, with others like it, I base on this evidence the assertion that I think I have a right to say that he would have died without this relief; and it was a relief. The patient said so. He kept asking for the apparatus, and inhaled most of the time. Had he been too weak to inhale, the passive mode would have been adopted. Others have had like experiences.

Capillary Bronchitis.—Some ten years ago a woman, 67 years old, had been sick with cough and cold for about six months. She had good medical attendance, but with no relief. The cough was persistent; sputa copious, white and glairy; both sides of chest clear on percussion; full of sonorous and sibilant crackling inspiratory and expiratory rales; loss of flesh and strength; blood showed no physical signs of phthisis or syphilis. Immediate relief followed the use of the nascent chloride of ammonium in this case. In one week's time the cough and rales had well nigh disappeared, and health was restored. She has had no return of the affection.

This is not a complaint that ordinarily gets well so quick; indeed, it is apt to baffle the most skillful following up. I have seen the nascent chloride give so much relief in these affections that I do not feel that I make a mistake when I attribute the relief to the means employed.

The Bronchitis of Children and Infants.—I wish to speak a word in behalf of these delicate subjects. All know how difficult it is to treat this class of cases, and that homeopathy has its supposed success in them, as it is so easy to give these patients medicines that taste like sugar. But it seems to me that Hahnemann never ordered a medicine so easy to take as chloride of ammonium. The child cannot help inhaling, and often reaches out its arms for the inhaler, showing that the inhalation must be pleasant, while at the same time we know that a common sense and appreciable influence must be exerted by the crystals. But putting this aside, I have seen cases where the favorable effects were marked and satisfactory.

The inhalation of the nascent chloride is one of the best modes to relieve or break up a cold. Generally, those who use the apparatus are glad to have it on hand for domestic use.

In conclusion, I hope that I have not given the impression that this remedy is "a cure-all;" it is not. Still I think that its use should be delegated to laymen, as I believe that, if the profession have the same experience with it in the acute affections named, that many lives will be saved and some severe sicknesses will be mitigated and made pleasant.

Advances in Materia Medica.—Within the last year or two, the contributions to the list of materia medica have been large. Among these novelties, a few possess valuable therapeutic properties; while the greater portion are mere novelties or old remedies revived, which will be classed as worthless as soon as they cease to pay the unscrupulous advertiser who recommends them to the over-credulous of our profession and to the public, by the most exaggerated statements of their wonderful virtues. To burden this paper with an enumeration of them, in my judgment, would be foreign to my subject. True advance is shown only after the agents suggested have been duly investigated by trustworthy and intelligent seekers after truth, and have been found efficacious in disease. Of such, I will briefly allude to.

Araroba, or goa powder—a Brazilian product, which came to the attention of the medical world through its efficacy in the Portuguese colonies, in Africa and Asia—places noted for the inveterate character of many loathsome skin diseases—as a remedy particularly for psoriasis. It has been examined chemically by Prof. Attfield. He disco-

vered its active principle to be crysophanic acid. The crude powder, as well as its active constituent, are now well endorsed as valuable medicinal agents, and the range of its usefulness much extended.

It is interesting to observe that our common yellow dock—rumex—that has enjoyed a certain amount of reputation among domestic remedies as a remedy for cutaneous diseases, such as ringworm, itch, etc., is found to be rich in this same crysophanic acid. A hint is here given to our country practitioners to utilize this indigenous plant in their practice.

Thymol—obtained from oil of thyme—has become a popular antiseptic and disinfectant. Perhaps no greater praise has been awarded to it than that arising from the fact that it is one of the few new remedies that meets with approbation in the pages of the *National Dispensatory*, last edition. As a remedy, it has the advantages over carbolic acid in its not being irritating or corrosive to the tissues of the body, and in possessing an agreable odor; and it is said to be not inferior to it in its disinfecting property. These advantages entitle it to a place in our materia medica. An ointment of it (30 grains to the ounce) is recommended as a substitute for the obnoxious tar ointment, in all cases where the latter may be efficacious.

Ethylates of Sodium and Potassium, recommended by Dr. Benj. W. Richardson, of London, appear to be valuable caustic agents. In the year 1870, Dr. Richardson, at a meeting of the Medical Society of London, read a paper on this subject; and again in the London Lancet (American edition) July, 1879, he calls the subject to the notice of the wider circle of medical practitioners.

Sodium Alcohol, or *Sodium Ethylate*, is prepared by simply treating absolute alcohol with metallic sodium. As thus obtained, it is in the form of a thick, white product. It is a most convenient caustic. Laid on dry parts of the body, it is comparatively inert; but so soon as the parts to which it may be applied give up a little moisture, its caustic action can be observed. Its action may be developed so gradually as to be hardly perceptible, or increased, by the intelligent use of it, to the most potent caustic effect.

The sodium salt is recommended more particularly for general use from its being a milder caustic than the potassium salt. For practical use, it is recommended for destroying morbid growths that are not favorable for excision by the knife. It may be used either externally or by injection into the morbid tissues. When the pain is felt to too great a degree, or when its caustic action is too pronounced, it may be quickly checked by a few drops of chloroform, which decompose it into an inert chloride salt and an ether.

Dr. Richardson has used these ethylates repeatedly in his practice, with much success, and recommends them chiefly in three forms of disease, viz.: Cutaneous nævus, lupus, and malignant ulcer. The remarks of Dr. Lauder Brunton, before the Medical Society of London, and published in the Lancet, January, 1879, are very interesting in the report of several cases of nævi, treated most satisfactorily with this remedy.

(The following notes on the two new *myotics*, eserine and pilocarpin,

and on the new *mydriatic*, duboisine, are kindly contributed by Dr. Joseph A. White, of Richmond.)

Eserine is one of the alkaloids of the calabar bean (physostigma venenosum), and was first introduced into ophthalmic practice by Prof. Lagueur, of Strasbourg, in 1875. It is most commonly used in the form of a neutral salt—the *sulphate of eserine*. A one per cent. solution (about four grs. to the ounce of water), if dropped into the eye, produces contraction of the pupil, spasms of the ciliary muscle, shortening of the range of vision, and a decrease of the radius of corneal curvature. It is, therefore a *myotic*, and its local effects are antagonistic to atropine and duboisine. Although it sometimes irritates the conjunctiva, I do not think it ever produces any constitutional symptoms.

As a local application, it has been used in corneal ulceration, more especially in the peripheral forms with tendency to perforation; in abscess of the cornea; in corneal suppuration following cataract extraction; in keratocomus; in commencing sympathetic irritation; in paresis of the accommodation, and in some forms of glaucoma with very favorable results.

In keratitis, it has not developed any specific action, and in glaucoma has disappointed the expectations that were at first formed of it as a curative means in this affection. In the acute form, it has, in some few cases, seemed to arrest the disease; in the sub-acute form, it is a palliative measure that may be resorted to as preparatory to iridectomy; but in neither form can it take the place of this operation. In chronic glaucoma, it may be positively dangerous, because of a tendency it has shown of bringing on acute attacks.

Pilocarpin is the active principle of jaborandi (policarpus penatifolius) which was discovered by Mr. Hardy, and introduced into ophthalmic practice. Its two salts—the muriate and nitrate—are both used, but more especially the former. Its local application causes contraction of the pupil, and increased secretion of the lachrymal gland, and by absorption may produce some of its constitutional effects. These are profuse perspiration, ptyalism and slight nausea, and in larger doses, vomiting, pain in abdomen and genitals, with general prostration.

As, when administered internally or hypodermically in such doses as do not produce the violent physiological effects, it improves the peripheral circulation, decreases the temperature of the body, and causes vascular depletion of the eye, it is a valuable remedy in treating iridocyclitis, in choroiditis exudation, in opacities of the vitreous, in retinal detachment, in glaucoma and in commencing atrophy of the optic nerves. In fact, some claim that it is almost a specific against commencing atrophy.

Locally, it is used in rheumatic and serous iritis, and in specific and rheumatic keratitis. As a myotic, it is inferior to eserine, as the latter produces no unpleasant effects beyond occasionally some irritation of the conjunctiva. For local application, a one per cent. solution (about 4 grs. to the ounce of water) of the muriate of pilocarpin is most commonly employed. Hypodermically, I have administered it in doses varying from gr. $\frac{1}{6}$ to gr. $\frac{1}{2}$ daily, according to the susceptibility of the individual to its influence, always regulating its administration so as to stop short of nausea and vomiting, as the perspiration, ptyalism

and reduction of temperature are sufficient manifestations of its physiological action. In some patients, I have seen it followed by profuse perspiration without ptyalism, and *vice versa*.

Duboisine, the latest remedy in ophthalmic therapeutics, is the active principle of the duboisia myoporoides, an Australian plant of the family of Scrofuloricees. The alkaloid was first obtained from the plant by Gerhard, of London.

Its action is very similar to atropine, but more powerful. It therefore belongs to the class of mydriatics, and is antagonistic to eserine and pilocarpin.

It is used in the same class of cases as atropine, but is superior to the latter, inasmuch as it dilates the pupils, and paralyzes the accommodation more promptly; its effects are less lasting, and it does not irritate the conjunctiva. From this latter property, it is indicated in cases which show an idiosyncrasy against atropine.

It also has the power of dilating the retinal veins; and further investigation of this property may show it to be a very valuable remedy in some affections of the fundus oculi. In rare instances (as reported by Dr. Seeley, of Cincinnati), when a strong solution has been used too continuously, it has produced vertigo and drowsiness.

The strength of the solution for local use is from two to four grains to the ounce.

All these remedies are very high-priced, and have not yet come into common use; and although many experiments have been made as to their applicability, their exact value as therapeutic agents has not yet been determined.—*Dr. Robinson, in Va. Transactions.*

Treatment of Diseases of the Tonsils.—Dr. George M. Lefferts read a paper including this subject. In the discussion, Dr. J. H. Douglass said that one reason for the chronic condition of enlarged tonsils was, in his opinion, a partial constriction of the tonsils by the anterior and posterior pillars of the fauces. The constriction resulted from a catarrhal inflammation of the tissues. A point in treatment was, to reach the posterior arch; and to effect this he found that the nozzle of syringe could be carried far enough back to wash out any concretions of mucus and apply appropriate remedies. That congestion could increase the size of the tonsil to three or four times its natural size he had proved by making post-mortem injections with lard. He had seen many tonsils, both large and small, removed, but he was not so favorably impressed with the operation as he had been. In enlarged tonsils he introduced the nozzle of a syringe into the crypts and washed them out. He had found that by this method of treatment, together with attention to the posterior arch, the tonsils soon became reduced in size. In regard to the hemorrhage after the operation, he had seen a number of cases in the practice of his brother-in-law, the late Dr. Horace Green, and had found that clots forming in the veins were the cause in many cases. After these clots were washed out the bleeding ceased.

Dr. Beverley Robinson was accustomed to apply to the crypts of the enlarged tonsil a probe coated with nitrate of silver. Many patients had a prejudice against the removal of the tonsils.

Dr. Roosa was sorry that the name "throat-deafness" had come

into use. It was unscientific, and should be replaced by the term catarrhal deafness. He did not believe that the tonsil pressed on the Eustachian tube, for in quinsy there was not, as a rule, deafness during the attack. He believed that the deafness was due to coincident catarh of the Eustachian tube.

Dr. R. P. Lincoln had known pain in the ear to accompany inflammation of the tonsils, and he was induced to believe that it was due to a nervous cause, inasmuch as branches of the glosso-pharyngeal and the otic ganglion were supplied to the ear. He had recently removed a mass from the tonsil of a patient who suffered from pain in the ear without disease of the ear. Relief followed the removal. He was in the habit of applying to the crypts of the hypertrophied tonsil a solution consisting of one part of carbolic acid and eight parts of the compound tincture of iodine. Cases usually improved after three or four applications. A Cuban lady came under his observation, suffering, as we supposed, from malignant disease of the tonsil. A mass of the size of a walnut, was removed and there followed complete relief. The pain was very severe, and over the parietal region of the affected side the hair was blanched over a space as large as a silver dollar.

Dr. Frank H. Bosworth thought that some cases of acute tonsillitis may be aborted by giving ten grains of quinine and subsequently ten drops of Fleming's tincture of aconite every hour until the physiological effects were complained of. He was of the opinion that nightmare in children was often the result of tonsillitis.—*Dr. Barker, in N. Y. Acad. of Med., N. Y. Med. Journal.*

A Case of Typhoid Fever Treated with Carbolic Acid Internally.—Dr. Henry Weekes, in a letter to editor of London Lancet, says :

If you will oblige me by bringing before your readers the following case, it may induce those who have more opportunities of meeting with typhoid fever than I have to see if similar results may be obtained in a more extensive trial.

On January 24th, I visited Ellen S——, aged eighteen, living in a detached cottage in the country. She had taken to her bed two days before, having been previously ailing for a week. I found her in a very febrile condition, with highly flushed face, anxious expression, tongue furred, and bowels relaxed three or four times a day; very little headache. Pulse 108; temperature (11 a.m.) 102–5°; skin dry. With the usual instructions as to diet, etc., I prescribed acetate of liquor ammoniæ and compound tincture of camphor.

Jan. 25th.—No apparent change. She complained much of sleeplessness. Ordered compound ipecacuanha powder and mercury with chalk at bed time.

26th. Some sleep. Tongue browner; diarrhœa lessened; some spots on abdomen, but scarcely observable. Pulse 109; temperature (12 a.m.) 103°.

27th. Much flushed; tongue more glazed; pulse 108; temperature 103–5° I prescribed glycerine of carbolic acid, six minims, every four hours.

28th.—Face less flushed; tongue moister, but spots more distinctly colored; pulse 100; temperature 101°. Continued carbolic acid.

29th.—Patient cheerful after a good night; diarrhœa nearly ceased; tongue rapidly cleaning; spots less evident; pulse 89; temperature 99°.

From this day she made a rapid recovery, sat up on February 1st, and was down stairs on the 4th.

Now, the sudden subsidence of fever on the administration of carbolic acid may be merely a coincidence, and the same remark may be made regarding the supposed results of other medicines in solitary cases; but such remarkable coincidences are certainly suggestive of more extended experiments. Until disproved, it appears to me more probable than otherwise that one was the effect of the other. Our great authority, Sir W. Jenner, says: "I have never known a case of typhoid fever cut short by any remedial agent—that is, cured. The poison which produces any one of the acute specific diseases (to which order typhoid as much as small pox belongs) having entered the system, all the stages of the disease must, as far as we know, be passed through before the recipient of the poison can be well."

Yet I submit that this very disease (small pox), here linked with typhoid fever, is undoubtedly modified and cut short in its course by introducing vaccine lymph into the system, even when vaccination has been performed so late as to run its course concurrently with the small pox. Why then should we remain content with thinking that typhoid fever must continue to the end unchecked?

The Cure of Cancer.—Professor John Clay, of Birmingham, has published some remarkable cases of cancer of the uterus cured by the internal administration of Chian turpentine. We give the following as one of the best marked cases. The patient (æt. 32) came to the Queen's Hospital after having been discharged incurable at the Women's Hospital. She was greatly depressed. She had had repeated floodings, and suffered greatly from pain during the last five months. Constipation very troublesome, probably due to opiates. She was found to be suffering from epithelial cancer of the os and cervix uteri, but not involving the vagina. There was a cancerous mass of the posterior parts of the os and cervix of the size of a goose egg. This growth pushed the os uteri towards the pubis, almost preventing that part from being felt.

A mixture containing six grain doses of Chian turpentine dissolved in ether and suspended in mucilage was taken three times a day, and from this period a very rapid diminution of the growth took place, so that by the sixteenth day it had almost entirely disappeared. The os uteri was now in situ, admitted the finger readily, and the vessels of the tumor assumed a shrivelled appearance. A solution of perchloride of iron was then used daily with excellent effect.

In the ninth week the patient suffered from spasmodic pains in the back and abdomen, which was attributed to the medicine. Iodide of calcium was then given for a fortnight. After this Chian turpentine was resumed and an arsenical lotion was used locally.

Under this treatment the woman very rapidly improved, the pains ceased and the parts become much reduced in size and more moveable. She was sent to a sanitarium and discharged convalescent.

Professor Clay says the Chian turpentine seems to act on the periphery of the growth with great vigor, causing the speedy disappearance

of cancerous infiltration, and thereby arresting the further development of the tumor. It appears to dissolve all the cancer cells. It is a most efficient anodyne causing an entire cessation of pain in a few days. The Professor, whose name is a sufficient guarantee for the diagnosis and the results of treatment, does not affirm that Chian turpentine is a positive cure for advanced cancer of the uterus. Nevertheless all the patients treated are still living, their disease has been arrested and has all but disappeared, and it certainly relieves the pain in a manner which cannot be said of any other remedy.—*London Lancet.*

Purgatives--For what Objects shall they be Administered in Treating Cases of Diarrhea and Dysentery.—These are given by Dr. J. J. Woodward (Part II, History War of Rebellion, page 726) thus: (1) To evacuate noxious matters contained in the alimentary canal. All admit that undigested food and substances undergoing putrefactive changes should be removed from the intestines of persons suffering from fluxes. To meet this object any pleasant, efficient purgative would suffice. (2) To increase or modify the secretion of the intestinal mucous membrane. It seems conclusively shown by Breeger that the neutral salts certainly possess the power of producing a discharge of watery fluid from the intestinal mucous membrane, mingled with increased secretion. Thus it seems that neutral salts produce greater increase in the intestinal secretions, with less irritation, than can be obtained with any other purgatives with which we are acquainted. It may reasonably be expected that, especially in the early stages of a catarrhal inflammation of the intestinal mucous membrane, such as occurs in acute catarrhal diarrhea and dysentery and in the catarrhal stage of diphtheritic dysentery, the action of purgatives which decidedly increase the intestinal secretion will relieve the congestion of the intestinal blood-vessels, and that, after the temporary increase of vascularity produced by their action has subsided, an improvement in the condition of the mucous membrane will follow. In chronic conditions moderate catharsis occasionally is beneficial in washing out the contents of the alimentary canal. (3) To increase the biliary secretion in alcoholic conditions, Rutherford has shown that a number of cathartics will increase the biliary secretion. The local irritation produced by some of these render them unsuitable for use in intestinal fluxes. Others are so mild as to readily fulfill the proposed indication. Of these are sulphate and phosphate of soda, Rochelle salts and rhubarb; these are cathartics upon which we should rely in the treatment of fluxes complicated with deficient hepatic secretion, instead of invoking the doubtful properties of calomel.—*Detroit Lancet.*

When to Perform Ovariotomy.—Edward Borck, M. D., of St. Louis, Mo., in an article on ovarian tumors, published in the Obstetric Gazette for March, 1880, gives it as his opinion that it would be better to recommend the operation rather a little too soon than too late, and that the early operation will be the accepted rule in the future for the following reasons:

1. That abdominal section is not by far so dangerous under the antiseptic method, as prior to this, without it. Peritonitis is thereby claimed to be prevented, and we are informed by good authority that

we now can operate at least one year sooner. Observe the success Schrœder and others had since they adopted the antiseptic method. (See also Nathan Bozeman's remarks on ovariotomy, New York Medical Record, July and August, 1878).

2. As the peritoneal cavity has been opened and exposed in other operations, without peritonitis following, and where waiting for distention was out of the question. For Dr. Martin, of Berlin, has removed five times a floating kidney, four times successfully, by abdominal section. Marion Sims tells us that his operations before Listerism would have been wholly unjustifiable.

So the danger of traumatic peritonitis is greatly reduced by Listerism, and the argument that in anemic patients the danger of secondary hemorrhage is not so likely to occur, seems to me not very solid, though it is true where there is no blood none can flow. I myself should prefer rather a little too much blood than too little; too much we can easily reduce, and we can control a too rapid flow of blood by contracting the blood-vessels by ergot, and may thereby prevent oozing. But where there is too little, more is hard to produce.

Six times vaginal ovariotomy has been performed in this country, all early operations, and successfully. The first, I believe, by T. G. Thomas, though it is not his belief that tho scope of this plan will ever be very great. But I myself believe a good deal speaks in its favor.

In conclusion, I would say that the object of this communication is to call attention to the above arguments, and especially to the inadvisability recommended, waiting or delaying the operation.—*Medical and Surgical Reporter.*

The Dissemination of Typhoid Fever.—Dr. Robert Volz, Grossherz. Bad., Obermedizinalrath and Bezinesarzt, at Carlsruhe, publishes the results of his investigations concerning the spread of typhoid fever as deduced from the examinations from official sources of sixty-two epidemics. The material included both the large and small epidemics as they prevailed in various parts of the grand duchy of Baden, since July, 1871. The number of sick amounted to 3,300, with 400 deaths.

The author's report shows that typhoid fever is brought into a house by a patient sick with the disease, and then disseminates itself through the household. It can be spread by intercourse with the patients or stay in the house of visitors. The report does not give exact information as to whether a visitor may himself remain free but carry the disease to others in other houses. But the report does prove that a single patient may start an epidemic in a place entirely free of the disease hitherto.

Typhoid fever is thus infectious from the sick to the well—that is, it is contagious. But infection is only possible when its specific poison adheres to a material substance by which its reproduction may be effected.

It is certain that the typhoid germ may spread itself from the washing. And drinking water may spread the disease, if the drinking water contain the germ.

As preventives of the spread of the disease, the following rules are given: The physician must give public notice of every case of typhoid

fever. So soon as the diagnosis is established, the patient must be isolated as much as possible. The house or room in which the patient lies should have posted on it a caution notice. Parties must not be removed to a house free of the disease, except to a hospital. The washing must be done by itself.

The time of the year has a distinct influence on outbreaks of typhoid fever. The greatest maximum is in the fall, and the highest mortality is in November. There is no mention of the influence of subsoil water.—*Med. Neuigk. f. prakt. Aerzte.*

The Tongue.—We shall not attempt to describe all the appearances, as found in various diseases, but only call attention to the following:

1. The broad, pallid, white-furred tongue, whether found in acute or chronic disease, and even in the same disease at different stages, it matters not, always indicates the want of the alkaline elements of the body. The patient that has such a tongue never wants an acid drink, because his system is already acid, whether the acid is in the stomach or blood, it matters not. In such cases, with our usual prescription, we must give alkalies, such as sulphate or bicarbonate of soda, in order to neutralize the acid. Then, and not till then, will our remedies act kindly and much more promptly, and the patient improve more rapidly. Now, if acids are prescribed when the tongue is broad and pallid, the system being full of acids already, it will be seen at once that no improvement could or should be expected. I remember, before I was aware of this rule, that I could not see why my remedies did not improve the patient; but now I give the proper alkali, removing the acid; then the remedies act more promptly, the tongue changes to a better appearance, and the patient improves correspondingly. This acid condition of the system is probably more often found in acute than in chronic diseases; at least, that is my observation. It needs but a trial to test this principle; have never known it to fail. I do not pretend to explain why the tongue looks thus when there is a superabundance of acid in the system.

2. The deep-red, sleek tongue, with a slight coat at the base, indicates just the opposite condition; here the system is in an alkaline condition, no matter in what form of disease. Then some kinds of acids must be given, to neutralize the superabundance of the alkali, before other remedial agents will, or even can, have a good effect. All persons that have this peculiar tongue desire acid drinks. This tongue is often (though not always) seen in erysipelas, typhoid fever, and many other diseases where the tincture of chloride of iron or muriatic acid will be the leading remedies. But if the system was in an acid condition, known by the broad, pallid tongue, those remedies would do more harm than good. Now I do not wish to inculcate the idea that alkalies or acids will cure any disease, but the above appearances of the tongue are indications of specific physical conditions, and those remedies are adjuvants, paving the way and assisting specific remedies.—DR. HENNING, *in Med. and Surg. Rep.*

First Death from Bromide of Ethyl.—Dr. J. Marion Sims reports in Medical Record, April 3d, a death from the use of bromide

of ethyl, as an anesthetic. The operation in which it was used lasted an hour and a half. This is the first death from this drug we have observed reported. It is also the longest operation made under the influence of this anesthetic. The successful cases all occurred in short operations—not over forty minutes. Lesson from Dr. Sims: He cautions about using it in long operations, or in cases suspected of having organic diseases of the kidneys. From the carefully elaborated report of the above-mentioned case, and from the discussion that has resulted therefrom, we are not convinced that the anesthetic was the prime cause of the death. Battey's operation very frequently results in the patient's death, even when performed by the best operators and under the most favorable circumstances. All of the subjects of this operation have for a long time suffered frequently repeated disturbances of the nervous system. So profound are the effects of these disturbances that recourse is had to this operation only to prevent epilepsy, insanity, or some other disorder that practically ruins all future prospects of happiness or healthful activity. In Dr. Sims' case the vicious circle had been maintained so long as to markedly impair all vital action of every organ in the body. We can understand that those organs should give way when called upon to endure the burden of an operation lasting for an hour and a half, and involving the most sensitive tissues in the body. There does not seem to be any reason to believe that a more fortunate result would have followed the use of ether or chloroform. Certainly from the same operation patients have died when the latter anesthetics were employed under circumstances as near like this one as we are likely to find. Doubtless the report alluded to will render surgeons more careful in the employment of this new anesthetic, a so render an important service to humanity.—*Det. Lancet.*

Ozœna.—The crusts which form in the nares in these cases should never be removed violently, as, in case hemorrhage be excited, they will always form again. They should be removed by post-nasal washings, or vapor or spray inhalations, and measures be taken to prevent their formation anew. Of these the best is the following ointment:

℞ **Iodoform** ..... grs. v–viij.
Ether ..... fl. ʒj–fl. ʒjss.

Solve and add:

Vaseline ..... ℥j.
Attar rosæ ..... mv–viij.

Three measures are particularly condemned:

1. Plugging the nostrils.
2. Employing pure glycerine, because of its powerful attraction for water, which only serves to increase the dryness of the parts.
3. The use of alum, tannin, or any other astringent, for the same reason. Also the use of nasal snuffs.

Applications of calomel powder to the ulcerated surfaces are also condemned, and, instead, is recommended the internal administration of the iodides, local applications of solid nitrate of silver to the pharingeal ulcerations, post-nasal douches, and applications of solutions of sulphate of copper to nasal ulcerations, and constant inunction of the nostrils with the vaseline ointment. Nitrate of silver the author never

uses in any form of throat disease, except syphilitic ulcerations, and then applied in the solid form to the exact spot. Even in these cases, the galvano-cautery, acid nitrate of mercury, or sulphate of copper is better. For disinfectants, the salycilates, thymol, and sanitas are preferred. General treatment directed to the particular diathesis of the patient is all important.—*N. Y. Med. Journal.*

Treatment of Syphilitic Ulcerations by Pyrogallic Acid. Vidal (Soc. de Therapeutique, Bull. Gen. de Therap., 1880, p. 184) has begun a series of researches upon pyrogallic acid, or pyrogallol. Pyrogallic acid, C6 H6 O3, obtained by the dry distillation of gallic acid heated to 200°-215° C., occurs in the form of needles or fine white scales. It melts at 115° C., and boils at 210° C. At 250° C. it decomposes into metagallic acid and water. It is soluble in two and one-half parts of water, and is also very soluble in alcohol, ether and glycerine. The aqueous solution becomes black when exposed to the air. It is neutral. M. Vidal made his first experiments with pyrogallic acid in 1878, employing it in the treatment of psoriasis. In Vienna it is used as a succedaneum to chrysophanic acid. It must be employed with caution, on account of its action upon the kidneys.

The syphilitic ulcerations in which M. Vidal employed pyrogallic acid were of a phagedenic character, and had resisted all previous efforts to stop their course. The acid was employed in the form of ointment, one part to five of lard, and was applied on three successive days; the pain caused was moderate, and only lasted eight or ten minutes. Under the action of these three cauterizations the surface of the phagedenic ulcers was decidedly modified. Three more applications were made, resulting in a rapid cure.

Since the first successful case M. Vidal employed this ointment for the purpose of dressing chancres, with very favorable results. The pure acid does not seem to have the same effects. He thinks it possesses an active affinity for neoplastic tissues. Dr. Dujardid-Beaumentz, however, does not agree with him on this point.—*Med. Times.*

Influence of Singing upon Health.—Prof. Manassein, of St. Petersburg, has published the result of a most interesting inquiry in which he has been engaged. He has made an examination of two hundred and twenty-two singers, varying in age from nine to fifty-three years, with particular reference to their chest measurement and pulmonary condition, as compared with persons who are not singers. He finds that the size of the chest is greater among singers than other classes, and that the relative advantage increases with the age of the vocalists.

Among singers who drink, he is convinced the habit prevents the due development of the chest. The vital capacity of the lungs is also greater in vocalists than in other persons.

Singers often suffer from soreness of the top of the throat, but seldom from bronchial catarrh; and the mortality from phthisis among them is, therefore, small. Vocalists, both drinkers and non drinkers, are, however, more subject to Bright's disease than people who do not sing. Singing is an excellent prophylactic for incipient consumption; and as a means for the development and strengthening of the chest is more efficacious than gymnastic exercises.—*N. Y. Med. Journal.*

SCIENTIFIC ITEMS.

The Sun's Rays as a Means of Research.—The Photographic News reports that M. Raoul Pietet is about to try, on an extensive scale experiment, having for its object the disassociation of the metalloids by means of the sun's rays. By the use of a huge metallic mirror, he hopes to bring such a concentration of sun rays to bear upon the metalloids as will enable him to definitely determine the truth or fallacy of the theories of Messrs. Lockyer and Victor Meyer. The experiment will probably be made at Geneva, and will, by reason of its magnitude, be unique for a research of this nature.—*Physician and Patient.*

Telephonic Transmission through the Human Body.—It is stated in Chamber's Journal that during some recent experiments in Glasgow it was proved that telephonic sound can be conveyed through a less facile conductor than the usual unbroken wire. In this case a break in the wire was taken up by a small circle of ladies and gentlemen, who joined hands and thus continued the electric current through their own bodies. The effect of interposing these human links was to diffuse and weaken the electric power; but the current was still sufficient to convey some audible reproduction of a song from the transmitting to the receiving end of a telephone.

The Telephone in Scotland.—We understand, says the Glasgow Herald, that an experiment upon the longest line of wire yet attempted to be telephonically connected in the British Isles has just been made with the Edison telephones on a private line between No. 7 Sauchiehall Street, Glasgow, and Grangemouth, distant a little over twenty-seven miles. Complete communication was established in about half an hour; and so successful was the operation that messages spoken from Glasgow to Grangemouth, and *vice versa*, were as distinctly audible at the other end as if uttered aloud in an adjoining room. It is added that a similar trial between Glasgow and Edinburgh only awaits the consent of the railway company.

Cold as a Motor.—Mr. John Gamgee has halted long enough in Louisville to allow his wonderful genius to develop a marvelous machine for the reduction of temperature in ordinary chambers, and for the ventilation of sick rooms, by the use of cold as a motor. He demonstrates by a beautiful experiment that a small piece of ice will drive a constant current of air through any ordinary room having two openings. He proposes to apply this to the ventilation of rooms of patients sick with contagious diseases, and, by the interposition of such chemical agents as are known to destroy septic matters, force all the vitiated air through such filters as will render it perfectly innocuous, thus bottling the poisonous effluvia until it can be rendered harmless. This is no vagary of the imagination; we have seen the experimental tests so often made that we are sure Mr. Gamgee's will drive air through a room in any desired direction.

Sanitas.—Russian turpentine and water are placed in huge earthenware jars, surrounded by hot water. Air is driven through the mixture in the jars continually for three hundred hours, the result being a decomposition of the turpentine, and the formation of a watery solution of the substance, to which Dr. Kingsett, the discoverer, has given the name of "Sanitas." After evaporation, the substance, as sold in tin cans is a light brown powder, of a pleasant taste and odor, and capable in a very remarkable degree of preventing or arresting putrefactive changes. This new disinfectant has been in use for some time in England, and is highly spoken of. It is said to have a pleasant odor, is not poisonous, and does not injure clothing, furniture, etc. For household uses it would seem to be well adapted.—*Scientific American.*

More Scotch Diamonds.—Just now the Scotch chemists, especially in Glasgow and vicinity, appear to have "atificial diamonds" on the brain. Mr. Mactear and Mr. Hannay are both Glasgow men; and now Mr. G. C. Stewart, of Greenock, thirty miles down the Clyde, says that he will soon be able to produce "millions of diamonds" of ordinary size every day. The machinery is not yet perfected, but he is going to exhibit his diamonds to the Royal Society "shortly." His is a "very simple chemical process."

A Transparent Fish.—A very remarkable fish was captured here on the 21st instant by Mr. O. Blossom. It is about ten feet in length, and its weight is estimated at about four hundred pounds. It is perfectly transparent, and the action of the heart and other functional organs can be plainly seen. Altogether, it is a very remarkable specimen of the finny tribe, and is well worth the attention of scientists and naturalists. Mr. Blossom will arrange a tank containing alcohol in order to preserve it.—*Mackinac, Mich., letter to Chicago Times.*

Engineering Inventions.—Mr. Allen T. Miller, of Philadelphia, Pa., has patented an improved guard for car wheels, the use of which, it is claimed, will render it impossible for any person or anything to be run over by the wheels.

Mr. Strafford C. Hallock, of Yaphank, N. Y., has invented an improved snow plow, which is so constructed as to raise the snow and discharge it at the sides of the track, however solid it may be packed. The invention consists in the combination of three shovels, placed one above the other, with their rear ends farther apart than their forward ends.

Mr. James Robson, of North Shields, County of Northumberland, England, has patented an improved gas engine. The invention consists in employing a piston and rod working in a cylinder. The instroke of the piston is used to draw in on one side of it a charge of gas or vapor and air. On the return stroke this charge is forced through passages into a combustion reservoir, and there retained until the piston returns to the back end of the cylinder. The reservoir is then made to communicate with the back or opposite side of the piston. The gases in the reservoir are then exploded by a flame; their expansion drives the piston forward, which, by its rod and connecting rod to the crank, turns the shaft and fly wheel. On the return of the piston the products of combustion are allowed to escape.—*Scient. Ameri.*

PRACTICAL NOTES AND FORMULÆ.

Cinchonia Alkaloid.——This tasteless alkaloid of the bark, prepared by Messrs. Powers & Weightman, we have found to be a valuable agent. The absence of taste makes it very convenient for children and those of delicate stomachs, to whom the sulphate of quinine is so objectionable on account of its extreme bitterness.

As an antiperiodic it is reliable and efficient, and for the poor is the more acceptable on account of its cheapness, being only about one-sixth that of quinia; and in consequence of this fact, very favorably received by a great many practitioners, who are forced to donate to the indigent no small quantity of medicine.

In bilious remittent fever or intermittent fever we like the following method of using it, especially if the case be one in the country which we cannot see often, and in which there is doubt as to the exact chill time:

℞. (For an adult.)
Cinchonia alkaloid.....grs. xxiv.
Ft. powders No. viij.

Take one every three hours continuously until all are taken, using a little lemonade as a drink. If the patient be a female, lessen the dose. Or if a child, give one to two grains in syrup in the same manner.

For menorrhagia, we have found it useful in connection with elixir vitriol as a drink; best adapted to cases of relaxed or debilitated habit, and in cases having malarial complication.

It seems to act by toning up the capillaries and equalizing the circulation.

In dysmenorrhea and neuralgic affections connected with uterine disorders, it is useful for the same reason. In these cases it is best combined with anodynes, as follows:

℞. Cinchonia alkaloid.....grs. xxiv.
Pulvis doveri.....grs. xv.
M. Ft. powders No. vi.

Take one three times a day.

Worms in the Nasal Cavities Expelled by Means of Chloroform.—A woman twenty-nine years of age, was attacked by variola in the ninth month of pregnancy; normal accouchement occurred on the second day of the eruption, the disease following its regular course. During the period of desquamation, a fly entered the nasal cavity and deposited there its eggs, which were soon transformed into larvæ. Fever, violent cephalalgia, and multiplication of the larvæ followed. Insufflations of calomel and injections of salt water were useless. Dr. Garuco then had recourse to inhalations of chloroform, and at the first trial, seventy larvæ were expelled. This treatment was repeated every day, and completely relieved the patient.

Experiments with some of the larvæ showed that, at first, chloroform caused very active movements, after which all movements ceased and complete inertia ensued.—*La France Medicale.*

Veratrum in Dysentery.—In acute dysentery of threatening character, I have called in the aid of this agent with a prompt and unerring reduction of the inflammation. In one case, where the febrile movement was of a sthenic character, the patient, by mistake or restlessness, took a poisonous dose of it about twelve hours after I commenced its administration, and after that had not another dysenteric movement, and I feared for a little while would never have another. Opium, brandy and a dry heat restored her. I have had several patients take hypermedicinal doses, and get a sudden jugulation (as the French say) of their pneumonia or other inflammation.

In good, honest, acute articular rheumatism—the more severe the better—I regard veratrum as serviceable as in pneumonia. This, with opium and sal Rochelle, will do the work quicker than salicylic acid. Veratrum as a sedative, sal Rochelle as an alkaline element, and opium to subdue pain and restrain over-action of the salt, and there we have the thing in a nutshell.—DR. GREEN *in Med. and Surg. Rep.*

Vermifuge.—

℞ Santonine..... grs. vi.
Podophyllin..... grs. j.
Sach. lacta..... grs. xxx.

M. and triturate thoroughly. Sig. Give each day grs. ij., morning, noon and night, in sweetened water.

The above "worm powders" secured the dislodgment and expulsion, per rectum, of sixteen ascaris lumbricoides averaging ten inches in length, and to the great astonishment of the friends of the little sufferer as well as myself, he passed a section of tænia solium twelve feet in length.—*Eclectic Medical Journal.*

Tartrate of Morphia.—This new preparation is recommended as being very soluble, and passing quickly out of the system, leaving less unpleasant after effects than either the muriate or acetate. Its great solubility makes it particularly advantageous for subcutaneous injection. It gives little smarting or irritation when thus administered, and the solution never clogs the finest needles.—*Louisville Medical News.*

For Dysentery.—Carlsbad salts will be found a good remedy in the early stages, or epsom salts, as follows:

℞ Sulphate of magnesia..... ℥ i.
Morphine..... gr. ½.
Water..... ℥ iv.
Spirits of camphor..... gtt. x. M.

Take one teaspoonful every one to two hours.

An Emetic for Infants.—Dr. S. W. Smith writes:

I beg leave to record that half a teaspoonful of glycerine acts as a simple and efficient emetic for infants. Perhaps some of your readers can confirm this by future experience.—*British Med. Journal.*

Inflammation of the Middle Ear.—Bezolds recommends as antiseptic measures in inflammation of the middle ear:

1. Disinfection of the meatus and of the cavity of the drum by means of a four-per-cent. solution of boracic acid.
2. Insufflation of finely-powdered boracic acid.
3. Closure of the meatus with salicylated or borated lint or cotton.

The above treatment was carried out in twenty-nine acute and one hundred and two chronic cases, with unvarying success. The time occupied in producing a cure was considerably less than by other methods. In the destructive necroses of bone which had developed in advanced cases of phthisis pulmonalis, and the suppurative inflammations of the roof of the drum cavity, which ended in rupture of the membrana shrapnelli, or passed to the formation of polypi at their site, this treatment was not so successful.—*Med. Herald.*

For Fresh Cold in the Head.—Dr. T. F. Houston writes: For fresh cold in the head, accompanied with obstruction in the nasal passages:

℞ Carbolic acid..... ʒ i.
Absolute alcohol..... ʒ ii.
Caustic solution of ammonia..... ʒ i.
Aqua distillat..... ʒ iii. M.

Make a cone of writing paper, put a small piece of cotton in it, drop on the cotton ten drops of the mixture, and inhale until all is evaporated. Repeat this every two hours until relieved.

Oleate of Lead in Eczema.—Mr. J. Sawyer, of London, gives in the Practitioner the following formula:

Lead oleate..... 24 parts.
Heavy and inodorous paraffin oil..... 14 parts.

The lead oleate is prepared by heating a mixture of oleic acid and oxide of lead. He can confidently recommend this ointment as a very efficient local application in eczema. He has used it successfully in a large number of cases.—*Med. and Surg. Reporter.*

Simple Mode of Reducing a Paraphimosis.—Where ordinary means fail, Bordinet proceeds as follows: He takes a hair-pin, presses the points together somewhat, and inserts the curved end under the strangulation back of the glans. He then applies a second and a third at intervals around the glans; then, drawing the prepuce forward, reduces it with great facility, the skin sliding over the three bridges without obstruction.—*Chicago Med. Jour. and Examiner.*

Richardson's Styptic Colloid.—

℞ Acid tannici..... ʒ ii.
Alcoholis absoluti..... f. ʒ ss.
Etheris..... ʒ iiss.
Collodion, qs. ad..... ʒ xii. M.

—*Monthly Review of Medicine and Pharmacy.*

EDITORIAL AND MISCELLANEOUS.

☞All Subscribers in arrears will please remit their subscription.

☞See card of C. R. Upson, M.D., Atlanta, Ga.

☞*Spectacles and Eye Glasses.*—Read the advertisement of S. Solomonson, jeweller and optician. Mr. Solomonson is a reliable gentleman, safe and moderate in his charges, and a good business man.

Lactopeptine.—We are in receipt of a beautiful sample of this valuable preparation from the Pharmacal Association of New York, for which our thanks are returned.
See their new advertisement in this journal.

The Southern Medical College.—This new and rising Institution will commence its second session, October 13th, 1880. The course of instruction in this school will be very full and thorough. The outlook is very encouraging for the future, and the founders are determined that it shall be second to no institution in the country.

Annual Meeting of the American Association of Medical Colleges.—This Association held its annual meeting in this city, in the afternoon of May 31st. Its principal work was the unanimous passage of a resolution recommending the adoption of three full courses in seperate years, as essential to obtaining a medical degree. It was also resolved that copies of the resolution be sent to the Association of Medical Editors, with a request for their co-operation in bringing about the three term course.—*The Medical Record.*

THE MEDICAL EDITORS' ASSOCIATION.

The fifth annual session of the American Medical Editors' Association was held on Monday evening, May 31, 1880, in the parlor of the Fifth Avenue Hotel. In the absence of the president, Dr. Thos. S. Powell, of Atlanta, Georgia, editor of the Southern Medical Record, the vice-president, Dr. Frank Woodbury, of the Boston Journal, presided at the meeting. Dr. Dudley S. Reynolds, of Louisville, was appointed secretary, in the absence of Dr. Davis, of Chicago. About thirty editors were present.

Dr. Woodbury, in a short address, called the meeting to order.

The metric system was discussed informally, and a communication from Dr. Baldwin, of Columbus, opposing it, was received and read. On motion the subject was laid over until the next meeting.

Dr. A. N. Bell read a very eloquent Annual Address, sent by the President, Dr. Powell, that gentleman being unavoidably detained at home by sickness in his family.

A resolution of thanks for the address and of condolence for the illness which kept the President away, was unanimously adopted, and the resolution ordered to be transmitted to Dr. Powell.

Drs. Bell, Brodie, and Nelson were appointed Nominating Committee, who reported the following officers for 1880:

For President, Dr. George F. Schrady, of the New York Medical Record.

Vice-President, Dr. F. Nelson, of St. Louis Archives of Medicine.

Secretary, Dudley S. Reynold, of Louisville Medical Record.

Dr. Wm. Hammond, of New York, editor of Neurological Contributions, was, on motion, directed to cast the ballot of the Association, and these officers were declared unanimously elected. Place of meeting to be determined by the action of the American Medical Association, the time to be the evening before the convening of that body.—*Boston Med. and Surg. Journal.*

ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

We extract from our exchanges (Boston Med. and Surg. Journal and New York Med. Record) the following brief of the proceedings of the American Medical Association.

As had been anticipated, the thirty-first annual meeting of the American Medical Association was very largely attended, and was one of the most successful and satisfactory sessions of this body which has yet been held. The city of New York, owing to the convenience of access and its numerous attractions, offered unusual inducements for the meetings, which were held in the lecture rooms of the College of Physicians and Surgeons, and in the Young Men's Christian Association rooms, on the southwest corner of Twenty-Third Street and Fourth Avenue, opposite to the college. The course of the proceedings was marked by harmony and dignity; much credit is due to the Committee of arrangements for the admirable manner in which the business and entertainments were provided for. The number of papers that were presented was so great, no less than one hundred and eighty-four having been placed in the hands of the committee, that it was utterly impossible to have them all read at the meeting.

It seems invidious to name only a few of the distinguished men who were present, but in addition to the officers of the meeting—President Prof. Lewis A. Sayre, of New York; Vice-Presidents R. Beverly Cole, of San Francisco, H. O. Marcy, of Massachuset s, F. Peyre Porcher, of South Carolina; Secretary William B. Atkinson, of Philadelphia; Assistant Secretary Walter R. Gillette, of New York—we observed upon the platform Professors H. I. Bowditch, of Boston, H. D. Gross, H. Pancoast, and Robert Bartholow, of Philadelphia, James White, of Buffalo, T. G. Richardson, of New Orleans, John L. Atlee, of Lancaster, Pa, J. Marion Sims, of New York, Dr. Moore, of Rochester, Dr. Lewis, of Philadelphia, Prof. Dunster, of Ann Arbor, Dr. Chadwick, of Boston; and among the distinguished strangers were Jonathan Hutchinson, of London, Dr. Hingston, of Montreal, and Dr. Irenholme, of Canada

The sections were officered as follows:

1. Section of Practice of Med., Materia Med., and Physiology, chairman, J. S. Lynch, M.D., Baltimore; secretary, W. B. Glasgow, M.D., St. Louis.

2. Section of Surgery and Anatomy, chairman, W. T. Briggs, M.D., Nashville, Tenn.; secretary, C. Powell Adams, M.D., Hastings, Minn.

3. Section of Obstetrics and Diseases of Women and Children, Prof. Morse, St. Louis, chairman, (in place of Dr. A. H. Smith, the regular appointee, who was detained by sickness; secretary, Robert Battey, M. D., of Rome, Ga.

4. Section of Medical Jurisprudence, Chemistry, Psychology, State Medicine, and Hygiene, chairman, James F. Hibberd, M.D., Richmond, Ind.; secretary, Thomas F. Wood, M. D., Wilmington, N. C.

5. Section of Ophthalmology, Otology, and Laryngology, chairman, Laurence Turnbull, M.D., of Philadelphia (Dr. Bolling A. Pope, of New Orleans, being absent); secretary, Eugene Smith, M. D., Detroit Michigan.

The Committee of Arrangements made several innovations at this meeting. The first was to encroach upon section three, and set aside a room for the meeting-place of those favoring the organization of a

separate section for diseases of children, with the intention of creating a separate section next year. This was done, but of course no further business was transacted before this sub-section. The next innovation was the publication of the programme in daily installments, after the method of the British Medical Association. The amount of business to be transacted made this arrangement necessary, and also justified the third innovation, which was the convention of the sections at two p.m. instead of three o'clock, as generally is the case.

The entertainments provided were very enjoyable; the size and style of the invitation cards and their number have seldom, if ever, been equalled, certainly not excelled.

On Tuesday evening, June 1st, a reception by the members of the medical profession and other citizens of New York was given at the Academy of Music, where Grafulla's orchestra discoursed most eloquent music; the Committee on Entertainment and Invitations being Drs. Chas. Inslee Pardee, Montrose A. Pallen, Robert F. Weir, Jos. C. Hutchinson, Wm. M. Polk, and E. H. Parker.

On Wednesday a complimentary entertainment was given to the members of the American Medical Association and their ladies by Messrs. Reed and Carnrick, Messrs. Scott and Bowne, and the New York Pharmacal Association. On this occasion was presented Othello, with Edwin Booth as Iago. Beautiful silk programmes were distributed.

On the evening of June 3d, Mayor Cooper, Mr. August Belmont, and Drs. Fordyce Barker and T. Gaillard Thomas each gave receptions to the delegates. The last named reception was held at the Academy of Music, and owing to the popularity of the hosts of the occasion it was very largely attended; as, indeed, were those of Messrs. Cooper and Belmont, which were everything that lavish hospitality could make them, to render them enjoyable by the guests.

On Friday afternoon, June 4th, Messrs. Wm. R. Wood & Co. invited the members of the Association upon a steamboat excursion around New York harbor, stopping at Brighton beach.

The General Session was called to order on June 1st., 11 o'clock by Pres. Lewis A. Sayre, of New York. Dr. Gaillard Thomas made the address of welcome, which was followed by an able address of President Sayre on the subject of "Improvement of Medical and Surgical Science in America." The officers chosen for the next year are as fol ows:

For President—John T. Hodgen, M.D., of St. Louis, Mo.

For Vice Presidents—1st, W. H. Anderson, M.D., of Mobile, Ala. 2d, Levi G. Hill, of New Hampshire. 3d, Henry T. Holton, of Vermont. 4th, H. Carpenter, of Oregon.

For Permanent Secretary—W. B. Atkinson, M.D., of Philadelphia, Pa.

For Treasurer—R. Dunglison, M.D., of Philadelphia, Pa.

For Librarian—Wm. Lee, M.D., Washington, D.C.

For Chairman of the Section on Practice of Medicine, Materia Medica, and Physiology—Dr. Charles Denison, of Colorado.

For Secretary—Dr. T. Ashby, of Maryland.

For Chairman of the Section on Surgery and Anatomy—Dr. H. McGuire, of Richmond, Va.

For Secretary—Dr. D. A Eve, of Tennessee.

For Chairman of the Section on Obstetrics and Diseases of Women—Dr. James R. Chadwick, of Boston, Mass.

For Secretary—Dr. J. Taber Johnson, of Washington, D.C.

For Chairman of the Section on Medical Jurisprudence and State Medicine—Dr. J. Reeves, of Wisconsin.

For Secretary—Dr. R. G. Young, of Arkansas.

For Chairman of the Section on Ophthalmology, Otology and Laryngology—Dr. D. S. Reynolds, of Kentucky.

For Secretary—Dr. S. M. Burnett, of Washington, D. C.

For Members of the Judicial Council, to fill vacancies—Drs. J. K. Bartlett, of Wisconsin; F. Staples, of Minnesota; D. R. Wallace, of

Texas; J. S. Billings, of U. S. Army; J. H. Warren, of Massachusetts; and A. T. Woodward, of Vermont.

The Committee recommended that the next meeting of the Association be held in the City of Richmond, Va., on the first Tuesday in May, 1881.

As Chairman of Committee of Arrangements—Dr. F. D. Cunningham, of Richmond, Va.

For Assistant Secretary—Dr. J. G. Cabell, of Virginia.

For Committee of Arrangements—Drs. Cunningham, McGuire and Cullen, of Richmond, Va., with power to select others to make a Committee of seven.

For Committee of Publication—The same as last year. Drs. W. B. Atkinson, T. M. Drysdale, William Lee, R. J. Dunglison, Albert Fricke, S. D. Gross and Casper Wistar, all of Philadelphia.

For Chairman of the Section on Practice of Medicine—Dr. Wm. Pepper, of Pa.

For Chairman of the Section on Diseases of Children—Dr. A. Jacobi, of New York.

For Secretary—Dr. W. H. Bradford, of Boston.

Dr. Hibberd, Chairman of the Section on Medical Jurisprudence and State Medicine, offered the following resolutions as sent up from the Section:

First—Endorsing the National Board of Health.

Second—That the Association recommend medical schools to establish a Chair of State Medicine as a part of the regular curriculum.

Third—That the name of the Section hereafter shall be, "Section on State Medicine."

Fourth—That the Committee on Prize Essays shall be Drs. S. E. Chaille, of La., J. L. Cabell, of Va. and A. N. Bell, of N. Y.

The President introduced Dr. John T. Hodgen, of St. Louis, the President-elect, who responded appropriately to the call of the Association.

The Association was then declared adjourned to meet in the City of Richmond, Va., on the first Tuesday in May, 1881.

BOOK NOTICES.

STUDENT'S POCKET MEDICAL LEXICON: Giving the correct pronunciation and definition of all words, and terms in general use in Medicine and the Collateral Sciences: with an appendix containing a list of poisons and their antidotes, abbreviations used in prescriptions, and a metric scale of doses. By Elias Longley, author of pronouncing Vocabulary of Geographical and Personal Names, Eclectic Manual of Phonography, etc. Philadelphia—Lindsay & Blakiston, 1879.

This is an exceedingly valuable and useful work for the student of Medicine.

THE MICROSCOPE AND MICROSCOPICAL TECHNOLOGY: A Text Book for Physicians and Students, by Heinrich Frey, Professor of Medicine in the University of Zunct. Translated and Edited by George R. Cutter, M.D., Surgeon in New York Eye and Ear Infirmary, Ophthalmic and Aural Surgeon to the St. Catherine and Williamsborough Hospitals, etc. Illustrated by three hundred and eighty engravings on wood: Second edition. New York, William Wood & Co., 1880.

This is a large volume of 606 octavo pages, neatly gotten up in bold plain type. The style is excellent, though the translation from the German is very literal. The work is able and comprehensive, treating of theory and mechanism of the Microscope-Apparatus for measuring and drawing; testing and using the Microscope; preparation of Microscopic objects; method of staining, etc. The blood, lymph, chyle, mucus and pus, etc., etc., described and illustrated with the various tissues and or-

gans of the body. We have not space to detail or do justice to this valuable work. It should be in the Library of every Student and progressive Medical man.

A PRACTICAL TREATISE ON NERVOUS EXHAUSTION (Nurasthemia): its symptoms, nature, sequences, treatment, by George M. Beard, A.M., M D. Fellow of the New York Academy of Medicine; Vice President of the American Academy of Medicine; Member of the American Neurological Association; of the American Association, the New York Neurological Society. New York, William Wood & Co., 1880.

This is a work of 103 octavo pages, containing much interesting matter upon a class of affections little understood by a majority of practitioners. Nervous affections of the character herein described are becoming more and more frequent in this country, and therefore the more important to be known by the practitioner. The work is very instructive, and will well repay perusal.

RECEIPTED.

[Receipts not acknowledged privately are entered here.]

1880—Drs. E. L. McGehee, J. C. Webb, McCrady, H. E. Hurst, L. N. Hyten, J. B. Barwick, C. C. Jones, A. L. Barry, L. J. Sherrell, J. W. Hoff, J. A. Ashford, A. G. Smythe, F. T. Thorpe, E. H. Wright, T. E. Morris, F. C. Davis, W. J. Rogers, C. D. Tatman, J. J. Purcell, A. Harris, J. M. Rearden, J. L. Hamilton, E. R. Young, P. J. Parker, J. F. Brooks, W. K. Chambers, Z. T. Young, F. M. Fitzhugh, R. L. Hunter, J. E. Martin, H. E. Archer, S. Y. T. Carter, W. H. Boykin, H. Pinson, T. B. Meacham, E. A. Speed, P. A. Wilhite, J. L. Phelps, 79, J. M. Boring, 79.

SPECIAL NOTICES.

WM. R. WARNER & Co.—We desire to call the attention of our readers to the advertisement of this house. It is one of the most reliable houses in the United States, and all the preparations which they advertise can be depended upon to be as represented. We have used their medicines ourselves, and have never been disappointed.

It is becoming more and more necessary to make remedies as little repulsive to patients as possible, and therefore those elegant preparations, as are many of the elixirs, syrups, and sugar-coated pills, are becoming popular among physicians; but a frequent drawback is the unreliability of the preparations of many manufactories. This objection, however, we know, does not hold in regard to those of Warner & Co.—*Cincinnati Medical News.*

We would call attention to the advertisement, on page 9, of **Messrs. HENRY THAYER & CO.**

This is an old and honorable house, having been established in their branch of Pharmaceutical Chemistry over thirty years.

All of their preparations are faithfully made of full strength, elegant in appearance, and have deservedly won a wide reputation. Physicians and druggists may depend upon the correctness and accuracy of any preparation bearng their label.

Their list of new Fluid Extracts is extensive, and the genuineness of indigenous raw material is certified at the Botanical Gardens of Harvard University.

THE NAME **PARKE, DAVIS & CO.** on the label of a package has become a guarantee to the physicians of this country, of honesty in the manufacture of the preparation. The firm is reaping the fruits which such a reputation naturally brings, and stands to-day second to no firm of pharmacists in this country in the extent of its business.

The Profession has, moreover, been placed under obligations to it for the great majority of the valuable New Remedies which have during the past few years been added to the materia medica. Inasmuch as it makes a specialty of New Remedies, physicians will do well in testing these to secure PARKE, DAVIS & Co's preparations of them before passing judgment on their merits.

The later additions which Parke, Davis & Co. have introduced are **Jamaica Dog Wood,** a substitute for opium; **Manaca,** the Brazilian antirheumatic remedy; and **Ergotæ Purificatus,** a constant preparation of ergot and one peculiarly adapted for hypodermic administration.

EXTRACT OF A LETTER FROM DR. HUNTER MCGUIRE.

Richmond, Va., April 1880. * * * * * In a host of diseases where a powerful tonic and alterative is wanted, the BEDFORD ALUM AND IRON MASS AND WATER is of inestimable value. HUNTER MCGUIRE.